

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-24. (Canceled)

25. (New) A dual bushing installation kit comprising:

a first metal bushing comprising a first body having first and second ends, the first and second ends connected by a first outer surface having a first outer circumference and a first inner surface having a first inner circumference, the first inner surface surrounding a first opening that extends through the first body;

a second metal bushing defined by a second body having first and second ends, the first and second ends connected by a second outer surface having a second outer circumference and a second inner surface having a second inner circumference, the second inner surface surrounding a second opening that extends through the second body;

wherein the second outer circumference is dimensioned to be substantially conforming with the first inner circumference such that the second bushing is closely insertable into the first opening of the first bushing; and

wherein sufficient radial displacement initiated at the second inner surface of the second body results in substantially equal displacement of both the second outer circumference and the first inner circumference in an outwardly radial direction.

26. (New) The kit of claim 25 wherein the circumferences are diameters.

27. (New) The kit of claim 25 wherein the dual-bushing installation kit is received in an opening of a structural work member.

28. (New) The kit of claim 25 wherein the amount of radial displacement achieved at the second outer surface is dependent, in part, on the modulus of elasticity and the ultimate strength of the first and second bushings.

29. (New) The kit of claim 25, further comprising:
a first flange radially extending from and attached to one end of the first bushing;
and
a second flange radially extending from and attached to one end of the second bushing.

fig 9

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cont

30. (New) The kit of claim 25 wherein the first body and the second body are cylindrical and concentric with respect to one another.

31. (New) The kit of claim 25 wherein the first body and the second body are elliptical, the first inner surface of the first bushing having a first elliptical profile that substantially conforms to a second elliptical profile defined by the second outer surface of the second bushing.

32. (New) A radially, cold-expandable, dual bushing assembly comprising:
a first, non-expanded, metal bushing defined by a first body having first and second ends, the first and second ends connected by a first outer surface and a first inner surface, the first inner surface surrounding a first opening that extends through the first body;
a second, non-expanded, metal bushing defined by a second body having first and second ends, the first and second ends connected by a second outer surface and a second inner surface, the second inner surface surrounding an opening that extends through the second body;

Put it
insert into it

wherein the bushings in their non-expanded state provide for the second outer circumference dimensioned to be substantially conforming with the first inner circumference such that the second bushing is closely insertable into the first opening of the first bushing;

wherein the non-expanded bushing assembly is capable of substantially equal displacement of both the second outer circumference and the first inner circumference in an outwardly radial direction when a radial displacement is initiated at the second inner surface of the second body; and

wherein compressive stresses are developed in the first bushing and compressive stresses are further developed in an area of a work member that is contiguous with and substantially surrounding the first bushing when the radial displacement is initiated at the second inner surface of the second body, the [compressive stresses] being sufficient to increase the fatigue life of the work member.

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33. (New) The assembly of claim 32 wherein the fatigue life of the work member is increased by at least 200% compared to if the dual-bushing assembly is not radially expanded. *support?*

34. (New) The assembly of claim 32 wherein the amount of radial displacement achieved at the second outer surface is dependent, in part, on the modulus of elasticity and the ultimate strength of the first and second bushings.

E and σ_{TS} = amt of radial displacement

35. (New) The assembly of claim 32, further comprising:
a first flange radially extending from and attached to one end of the first bushing;
and
a second flange radially extending from and attached to one end of the second bushing.

36. (New) The assembly of claim 32 wherein the first body and the second body are cylindrical and concentric with respect to one another.

37. (New) The assembly of claim 32 wherein the first body and the second body are elliptical, the first inner surface of the first bushing having a first elliptical profile that substantially conforms to a second elliptical profile defined by the second outer surface of the second bushing.

38. (New) A multi-component fixture to be mounted in an opening of a work-piece via cold work expansion, the multi-component fixture comprising:

a first bushing having a body comprising a wall having an outer perimeter and an inner perimeter, the inner perimeter of the first bushing forming a passage extending longitudinally through at least a portion of the body of the first bushing, at least a portion of the wall of the first bushing laterally plastically deformable between an unexpanded position in which the inner perimeter of the passage in the first bushing has a first circumference and an expanded position in which the inner perimeter of the passage in the first bushing has a second circumference, the second circumference greater than the first circumference; and

a second bushing having a body comprising a wall having an outer perimeter and an inner perimeter, the inner perimeter of the second bushing forming a passage extending longitudinally through at least a portion of the body of the second bushing, at least a portion of the wall of the second bushing laterally plastically deformable between an unexpanded position in which the outer perimeter of the second bushing has a circumference closely received by the first circumference of the inner perimeter of first bushing and an expanded position in which the outer perimeter of the second bushing has a circumference providing an interference fit the second circumference of the inner perimeter of the first bushing.

39. (New) The fixture of claim 38 wherein the wall of the first bushing is a cylindrical wall.

40. (New) The fixture of claim 38 wherein the wall of the second bushing is a cylindrical wall.

41. (New) The fixture of claim 38 wherein the outer perimeter of the wall of the second bushing in the expanded position produces compressive stresses in the first bushing and compressive stresses in a work member that is contiguous with and substantially surrounding the first bushing, the compressive stresses being sufficient to increase the fatigue life of the work member.
